

Unclassified

Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 January Through 30 June 1998.

Table of Contents

Scope Note

Acquisition by Country:

Egypt
India
Iran
Iraq
Libya
North Korea
Pakistan
Sudan
Syria

Key Suppliers:

China
Russia
North Korea
Western Countries

Trends

Scope Note

The Director of Central Intelligence (DCI) hereby submits this report in response to a Congressionally directed action in Section 721 of the FY 1997 Intelligence Authorization Act, which requires:

- "(a) Not later than 6 months after the date of the enactment of this Act, and every 6 months thereafter, the Director of Central Intelligence shall submit to Congress a report on
- (1) the acquisition by foreign countries during the preceding 6 months of dual-use and other technology useful for the development or production of weapons of mass destruction (including nuclear weapons, chemical weapons, and biological weapons) and advanced conventional munitions; and
 - (2) trends in the acquisition of such technology by such countries."

At the DCI's request, the DCI Nonproliferation Center (NPC) drafted this report and coordinated it throughout the Intelligence Community. As directed by Section 721, subsection (b) of the Act, it

is unclassified. As such, the report does not present the details of the Intelligence Community's assessments of weapons of mass destruction and advanced conventional munitions programs that are available in other classified reports and briefings for the Congress.

Acquisition by Country:

Following are summaries by country of acquisition activities (solicitations, negotiations, contracts, and deliveries) related to weapons of mass destruction (WMD) and advanced conventional weapons (ACW) that occurred from 1 January through 30 June 1998. We chose to exclude countries that already have substantial WMD programs, such as China and Russia, as well as countries that demonstrated little WMD acquisition activity of concern. The countries deemed of most concern are listed in alphabetical order.

Egypt

Egypt continues its effort to develop and produce the Scud B and Scud C and to develop the two-stage Vector short-range ballistic missiles (SRBMs). Cairo also is interested in developing a medium-range ballistic missile (MRBM). During the first half of 1998, Egypt continued to obtain ballistic missile components and associated equipment from North Korea. This activity is part of a long-running program of ballistic missile cooperation between these two countries.

India

India has tried to alleviate problems caused by foreign export controls by relying primarily on indigenous resources for the development and production of its ballistic missiles. Although striving to achieve independence from foreign suppliers, India's ballistic missile programs still benefited from the acquisition of foreign equipment and technology. India sought items for these programs during the reporting period from a variety of sources worldwide, including many countries in Europe and the former Soviet Union.

India also continued to seek nuclear-related equipment, materials, and technology during the first half of 1998, some of which could be used in nuclear weapons applications. The most sought-after goods were of Russian- and UK-origin. India continues to pursue the development of advanced nuclear weapons, as evidenced by the underground nuclear tests that it conducted in May 1998. The acquisition of foreign equipment could benefit India in its efforts to develop and produce more sophisticated nuclear weapons.

Iran

Iran remains one of the most active countries seeking to acquire WMD technology and ACW. During the reporting period, Iran focused its efforts to acquire WMD-related equipment, materials, and technology primarily on two countries: Russia and China. Iran is seeking to develop an indigenous capability to produce various types of nuclear, chemical, and biological weapons and their delivery systems.

During the reporting period, entities in Russia and China continued to supply missile-related goods and technology to Iran. Tehran is using these goods and technologies to achieve its goal of becoming self-sufficient in the production of MRBMs. The July flight test of the Shahab-3 MRBM demonstrates the success Iran has achieved in realizing that goal. Iran already is producing Scud SRBMs with North Korean help and has begun production of the Shahab-3. In addition, Iran's Defense Minister has publicly acknowledged the development of the Shahab-4 ballistic missile, with a "longer range and heavier payload than the

1,300-km Shahab-3."

Iran obtained material related to chemical warfare (CW) from various sources during the first half of 1998. It already has manufactured and stockpiled chemical weapons, including blister, blood, and choking agents and the bombs and artillery shells for delivering them. However, Tehran is seeking foreign equipment and expertise to create a more advanced and self-sufficient CW infrastructure.

Tehran continued to pursue purchasing dual-use biotechnical equipment from Russia and other countries, ostensibly for civilian uses. Its biological warfare (BW) program began during the Iran-Iraq war, and Iran may have some limited capability for BW deployment. Outside assistance is both important and difficult to prevent, given the dual-use nature of the materials and equipment being sought and the many legitimate end uses for these items.

During the first half of 1998, Iran also actively sought modern battle tanks, surface-to-air missiles, aircraft, and other weapon systems and spare parts from the former Soviet Union (FSU), China, and Europe. Iran's armed forces employ weapons from a wide variety of sources, including old US weapons, FSU aircraft seized from Iraqi pilots fleeing the Gulf war, and Chinese antiship cruise missiles. As with its WMD programs, Tehran is seeking relevant production technology to lessen its dependence on foreign sources.

Russian entities continued to market and support a variety of nuclear-related projects in Iran during the first half of 1998, ranging from the sale of laboratory equipment for nuclear research institutes to the construction of a 1,000-megawatt nuclear power reactor in Bushehr, Iran, that will be subject to International Atomic Energy Agency (IAEA) safeguards. These projects, along with other nuclear-related purchases, will help Iran augment its nuclear technology infrastructure, which in turn would be useful in supporting nuclear weapons research and development.

Russia has committed to observe certain limits on its nuclear cooperation with Iran. For example, President Yel'tsin has stated publicly that Russia will not provide militarily useful nuclear technology to Iran. Beginning in January this year, the Russian Government has taken a number of steps. For example, in May 1998, Russia announced a decree intended to strengthen compliance of Russian businesses with existing export controls on proliferation-related items.

During the reporting period, China continued to work on one of its two remaining projects--to supply Iran's civil nuclear program with a zirconium production facility. This facility will be used by Iran to produce cladding for reactor fuel. As a party to the Nuclear Nonproliferation Treaty, Iran is required to apply IAEA safeguards to nuclear fuel, but safeguards are not required for the zirconium plant or its products. During the US-China October 1997 Summit, China pledged not to engage in any new nuclear cooperation with Iran and to complete cooperation on two ongoing nuclear projects in a relatively short time. This pledge appears to be holding. In addition, China promulgated new export regulations in June 1998 that cover the sale of dual-use nuclear equipment. The regulations took effect immediately and were intended to strengthen control over equipment and material that would contribute to proliferation. Promulgation of these regulations fulfills Jiang Zemin's commitment to the United States last fall to implement such controls by the middle of 1998.

Iran claims to desire the establishment of a complete nuclear fuel cycle for its civilian energy program. In that guise, it seeks to obtain whole facilities, such as a uranium conversion facility, that, in fact, could be used in any number of ways in support of efforts to produce fissile material needed for a nuclear weapon. Despite outside efforts to curtail the flow of critical technologies and equipment, Tehran continues to seek fissile material and technology for weapons development and has set up an elaborate system of military and civilian organizations to support its effort.

Iraq

Iraq has purchased numerous dual-use items for legitimate civilian projects--in principle subject to UN scrutiny--that also could be diverted for WMD purposes. Since the Gulf war, Baghdad has rebuilt key portions of its chemical production infrastructure for industrial and commercial use. Some of these facilities could be converted fairly quickly for production of CW agents. The recent discovery that Iraq had weaponized the advanced nerve agent VX and the convincing evidence that fewer CW munitions were consumed during the Iran-Iraq war than Iraq had declared provide strong indications that Iraq retains a CW capability and intends to reconstitute its pre-Gulf war capability as rapidly as possible once sanctions are lifted.

Iraq continues to refuse to disclose fully the extent of its BW program. After four years of denials, Iraq admitted to an offensive program resulting in the destruction of Al Hakam--a large BW production facility Iraq was trying to hide as a legitimate biological plant. Iraq still has not accounted for over a hundred BW bombs and over 80 percent of imported growth media--directly related to past and future Iraqi production of thousands of gallons of biological agent. This lack of cooperation is an indication that Baghdad intends to reconstitute its BW capability when possible.

Baghdad is developing two ballistic missiles that fall within the UN-allowed 150-km range restriction. The Al Samoud liquid-propellant missile--described as a scaled-down Scud--began flight-testing in 1997. Technicians for Iraq's pre-war Scud missiles are working on the Al Samoud program and, although under UNSCOM supervision, are developing technological improvements that could be applied to future longer-range missile programs. The Ababil-100 solid-propellant missile is also under development, although progress on this system lags the Al Samoud. After economic sanctions are lifted and UN inspections cease, Iraq could utilize expertise from these programs in the development of longer-range missile systems.

We assess that Iraq continues to hide documentation, and probably some equipment, relating to key aspects of past nuclear activities. After years of Iraqi denials, the IAEA was able to get Iraq to admit to a far more advanced nuclear weapons program and a project based on advanced uranium enrichment technology. However, Baghdad continues to withhold significant information about enrichment techniques, foreign procurement, and weapons design.

Libya

Libya continued to obtain ballistic missile-related equipment, materials, and technology during the first half of 1998. Outside assistance is critical to keeping its fledgling ballistic missile development programs from becoming moribund. Nevertheless, the UN embargo has restricted the flow of ballistic missile goods and technology reaching Libya.

Libya remains heavily dependent on foreign suppliers for precursor chemicals and other key CW-related equipment. UN sanctions continued to severely limit that support during the first half of 1998. Still, Tripoli has not given up its goal of establishing its own offensive CW capability and continues to pursue an independent production capability for the weapons.

Libya also sought to obtain spare parts and other support for its military aircraft and naval vessels from sources in the FSU and Eastern Europe. Once again, the UN embargo has greatly affected Tripoli, restricting its ability to keep Libya's Air Force operational.

North Korea

During the reporting period, North Korea attempted to obtain raw materials for its ballistic missile programs. Otherwise, it sought little in the way of dual-use equipment and technology for its own weapons programs. Pyongyang does not require significant outside assistance to produce ballistic missiles or weapons of mass destruction. North Korea produces and is capable of using a wide variety of CW agents and delivery means and is capable of supporting a limited BW effort.

We assess that North Korea has produced enough plutonium for at least one, possibly two, nuclear weapons. The United States and North Korea are canning spent fuel from the Yongbyon complex for ultimate shipment out of the North in accordance with the 1994 Agreed Framework. That reactor fuel may contain enough plutonium for additional weapons.

Pakistan

Pakistan sought a wide variety of dual-use nuclear-related equipment and materials from sources throughout the world during the first half of 1998. Islamabad has a well-developed nuclear weapons program, as evidenced by its first nuclear weapons tests in late May 1998. (The United States imposed sanctions against Pakistan as a result of these tests.) Acquisition of nuclear-related goods from foreign sources will be important for the development and production of more advanced nuclear weapons.

Chinese and North Korean entities continued to provide assistance to Pakistan's ballistic missile program during the first half of 1998. Such assistance is critical for Islamabad's efforts to produce ballistic missiles. In April 1998, Pakistan flight tested the 1,300-km Ghauri MRBM, which is based on North Korea's No Dong missile. Also in April 1998, the United States imposed sanctions against Pakistani and North Korean entities for their role in transferring Missile Technology Control Regime Category I ballistic missile-related technology.

Sudan

During the reporting period, Sudan sought to acquire a wide variety of military equipment from sources in North Korea, Eastern Europe, and the FSU. The shopping list included tanks, armored fighting vehicles, aircraft, antitank guided missiles, surface-to-air missiles, and a wide variety of ammunition. Sudan is seeking older, less expensive weapons that nonetheless are advanced compared with the capabilities of the weapons possessed by its opponents in the long-running civil war.

Sudan has been developing the capability to produce chemical weapons for many years. In this pursuit, Sudan obtained help from other countries, principally Iraq. Given its history in developing CW and its close relationship with Iraq, Sudan may be interested in a BW program as well.

Syria

Syria continued to seek CW-related precursors from various sources during the reporting period. Damascus already has a stockpile of the nerve agent sarin and may be trying to develop more toxic and persistent nerve agents. Syria remains dependent on foreign sources for key elements of its CW program, including precursor chemicals and key production equipment.

During the first half of 1998, Damascus continued work on establishing a solid-propellant rocket motor development and production capability. Foreign equipment and assistance

have been and will continue to be essential for this effort.

In addition, Russia continued to deliver advanced antitank guided missiles to Syria. The vast majority of Syria's arsenal consists of weapons from the former Soviet Union. Russia wants to keep its predominant position as the key supplier of arms to Syria.

Key Suppliers:

China

During the first half of 1998, China continued to take steps to strengthen its control over nuclear exports. China promulgated new export control regulations in June 1998 that cover the sale of dual-use nuclear equipment. This follows on the heels of the September 1997 promulgation of controls covering the export of equipment and materials associated exclusively with nuclear applications. These export controls should give the Chinese Government greater accounting and control of the transfer of equipment, materials, and technology to nuclear programs in countries of concern.

China pledged in late 1997 not to engage in any new nuclear cooperation with Iran and to complete work on two remaining nuclear projects--a small research reactor and a zirconium production facility--in a relatively short period of time. During the first half of 1998, Beijing appears to have implemented this pledge. The Intelligence Community will continue to monitor carefully Chinese nuclear cooperation with Iran.

During the reporting period, Chinese entities provided a variety of missile-related items and assistance to several countries of proliferation concern. China also was an important supplier of ACW to Iran through the first half of 1998.

Chinese entities sought to supply Iran and Syria with CW-related chemicals during this reporting period. The US sanctions imposed in May 1997 on seven Chinese entities for knowingly and materially contributing to Iran's CW program remain in effect.

China has provided extensive support in the past to Pakistan's WMD programs, and some assistance continues. China's involvement with Pakistan will continue to be monitored closely.

Russia

Russian firms supplied a variety of ballistic missile-related goods and technical know-how to foreign countries during the reporting period. For example, Iran's earlier success in gaining technology and materials from Russian companies accelerated Iranian development of the Shahab-3 MRBM, which was first flight tested in July 1998.

During the first half of 1998, Russia remained a key supplier for civilian nuclear programs in Iran and, to a lesser extent, India. With respect to Iran's nuclear infrastructure, Russian assistance would enhance Iran's ability to support a nuclear weapons development effort. Such assistance is less likely to significantly advance India's effort, given that India's nuclear weapons program is more mature. By its very nature, even the transfer of civilian technology may be of use in the nuclear weapons programs of these countries.

Russia remains a key source of biotechnology for Iran. Russia's world-leading expertise in biological weapons makes it an attractive target for Iranians seeking technical information and training on BW agent production processes.

Russia also was an important source of conventional weapons and spare parts for Middle Eastern countries like Iran and Syria, that are seeking to upgrade and replace their existing conventional weapons inventories.

Following intense and continuing engagement with the United States, Russian officials have taken some positive steps. Russia has committed to observe certain limits on its nuclear cooperation with Iran, such as not providing militarily useful nuclear technology. In January 1998, the Russian Government issued a broad decree prohibiting Russian companies from exporting items known or believed to be used for developing WMD or related delivery systems, whether or not these items are on Russia's export control list. In May 1998, Russia announced a decree intended to strengthen compliance of Russian businesses with existing export controls on proliferation-related items. These actions, if enforced, could help to counter the proliferation of WMD and their delivery systems. However, there are signs that Russian entities have continued to engage in behavior inconsistent with these steps. Monitoring Russian proliferation behavior, therefore, will have to remain a very high priority for some time to come.

North Korea

Throughout the first half of 1998, North Korea continued to export ballistic missile-related equipment and missile components and materials to countries of concern. Pyongyang attaches a high priority to the development and sale of ballistic missiles, equipment, and related technology. North Korea has little else to export to raise significant amounts of hard currency besides ballistic missiles and other weapons.

Western Nations

During the first half of 1998, Western nations were not as important sources for WMD-related goods and materials as in past years. Increasingly rigorous and effective export controls and cooperation among supplier countries have led foreign WMD programs to look elsewhere for controlled dual-use goods. Spare parts for dual-use equipment and widely available materials and scientific equipment were the most common items sought.

Trends

Foreign WMD procurement managers in countries of concern have responded to Western export controls by seeking dual-use goods largely from Russia and China. In addition, the countries of concern are looking more to each other as a source of ballistic missiles systems, critical missile components, and related technology. In these cases, assistance from countries like China and Russia may still be needed to integrate the components and technologies into an effective operational weapon system.

Countries determined to maintain WMD programs over the long term have been placing significant emphasis on insulating their programs against interdiction and disruption. Many of them are trying to reduce their dependence on imports by developing indigenous production capabilities. Although these capabilities may not always be a good substitute for foreign imports--particularly for more advanced technologies--in many cases they may prove to be adequate.